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WHAT IS CLAIMED IS:

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1. A steerable catheter comprising:

an elongated tubular catheter body having at least one lumen extending therethrough and a flexible tubular tip section extending from the distal end of the catheter body and having at least one lumen extending therein in communication with a lumen extending through the catheter body;

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a control handle at the proximal end of the catheter body comprising at least one member manually movable between first and second positions;

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first and second puller wires extending from the control handle through a lumen in the catheter body and into a lumen in the tip section, said first and second puller wires being attached to each other at their distal ends and being slidably mated along at least the length of the first and second puller wires that extend through the catheter body and tip section, the proximal end of the first puller wire being coupled to a movable member in the control handle and the proximal end of the second puller wire being coupled to a second movable member or a stationary movable member in the control handle;

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whereby movement of the movable member in the control handle coupled to the first puller wire from its first to its second positions results in deflection of the catheter tip.

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2. A steerable catheter as claimed in claim 1 wherein the mated first and second puller wires are slidably interengaged.

3. A steerable catheter as claimed in claim 1 wherein the mated first and second puller wires are slidably interlocked.

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4. A steerable catheter as claimed in claim 1 wherein each of the puller wires have at least one generally flat surface.

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5. A steerable catheter as claimed in claim 1 wherein the puller wires each have a generally rectangular cross-section.

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6. A steerable catheter as claimed in claim 1 wherein the puller wires
extend through a tubular sleeve and are maintained in mated relationship by
5 means of the tubular sleeve.

7. A steerable catheter as claimed in claim 6 wherein the sleeve has a
generally rectangular or oval cross-sectional shape.

10 8. A steerable catheter as claimed in claim 1 wherein the puller wires
extend through a shaped lumen in the tip section and are maintained in
mated relationship by means of the shaped lumen.

15 9. A steerable catheter as claimed in claim 8 wherein the shaped
lumen has a generally rectangular or oval cross-sectional shape.

20 10. A steerable catheter as claimed in claim 1 the proximal ends of the
first and second puller wires are coupled to first and second movable members
respectively, each movable members being movable between first and second
positions.

25 11. A steerable catheter as claimed in claim 1 wherein movement of the
first movable member from its first position to its second position results in
proximal movement of the first puller wire relative to the second puller wire.

30 12. A steerable catheter as claimed in claim 1 wherein wherein
movement of the first movable member from its first position to its second
position results in a force being applied to the first puller wire in a proximal
direction and a force being applied to the second puller wire in a distal direction.

35 13. A steerable catheter comprising:
an elongated tubular catheter body having at least one lumen extending
therethrough and a flexible tubular tip section extending from the distal end of
the catheter body and having at least one lumen extending therein in
communication with a lumen extending through the catheter body;

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a control handle at the proximal end of the catheter body comprising at least two members manually movable between first and second positions;

5 first and second puller wire pairs extending from the control handle through a lumen in the catheter body and into a lumen in the tip section, each puller wire pair comprising first and second puller wires wherein the first and second puller wires of each puller wire pair are attached to each other at their distal ends and are slidably mated along at least the length of the first and
10 second puller wires that extend through the catheter body and tip section, the distal end of the first puller wire pair extending into a lumen in the tip section to a first location and the distal end of the second puller wire pair extending into a lumen in the tip section to a second location distal to the first location, and wherein the proximal end of the first puller wire of each puller wire pair is
15 coupled to a separate movable member in the control handle and the proximal end of the second puller wire of each puller wire pair is coupled to a second movable member or a stationary movable member in the control handle;

whereby movement of the movable member in the control handle coupled to the first puller wire of the first puller wire pair from its first position to its
20 second position results in deflection of the catheter tip at the first location and movement of the movable member in the control handle coupled to the first puller wire of the second puller wire pair from its first position to its second position results in deflection of the catheter tip at the first location.

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